Line 21, after "common" insert --,--.

Page 35

Line 12, change "another" to --a third--.

Line 14, after "use" insert --,--; after "common" insert --,--.

Line 20, after "description," insert --these embodiment of--.

Line 25, after "microprocessor" insert --of the display device--; change "included in" to

--of--.

Page 36

Line 4, after "asynchronous" insert --or synchronous--.

In The Claims

Please cancel claims 5, 9, 10, 13, 14, and 15. without prejudice or disclaimer of the subject matter contained therein.

Please amend claims 1-4, 6, 8, 11 and 12 as follows:

1. (Amended)   An external display device of a refrigerator comprising:

a display unit mounted on an outer case of the refrigerator, the display unit decoding a display control signal applied thereto, thereby executing a display operation;

a control unit [means for] converting the display control signal, adapted to control the display operation of the display unit, into serial data, and outputting the converted display control signal; and

a <u>bi-directional</u> data signal line adapted to transmit data between the display unit and the control <u>unit</u> [means] in a serial manner.

2. (Amended)   The external display device in accordance with Claim 1, wherein:

the display unit converts a plurality of key input signals into serial data and outputs the serial data to the control <u>unit</u> [means]; and

the control <u>unit</u> [means] decodes the key input signals and executes a control based on the decoded key input signals.

3. (Amended)   An external display device of a refrigerator comprising:

a display unit mounted on an outer case of the refrigerator, the display unit recognizing a key input and converting the recognized key input into serial data, while decoding a display control signal indicative of an operating state of the refrigerator and executing a display operation based on the decoded signal;

<u>a</u> control <u>unit</u> [means for] converting the display control, signal into serial data and outputting the converted display control signal, <u>the control unit also</u> [while] decoding a key signal received from the display unit and executing a control based on the decoded key signal; and

<u>a bi-directional</u> data signal line [means] adapted to transmit data between the display unit and the control <u>unit</u> [means] in a serial manner.

4. (Amended)   The external display device in accordance with Claim 3, wherein the display unit comprises auxiliary control unit [means for] receiving a command from the control unit [means], thereby executing an intermediate control until the operating state of the refrigerator is displayed.

6. (Amended)   The external display device in accordance with Claim 3 [5], further comprising a voltage supply line for supplying a supply voltage to the control unit [means] and the auxiliary control unit [means].

8. (Amended)   The external display device in accordance with Claim 3 [7], wherein the data transmitted through the data signal line has a data format comprising a header portion indicative of the beginning of the transmission data, a command portion indicative of command data to be transmitted, a data portion indicative of data appended to the command data, and a trailer portion indicative of the end of the transmission data.

11. (Amended) A method for controlling an external display device of a refrigerator adapted to display an operating state of the refrigerator while enabling a key selection for controlling the refrigerator, comprising [the steps of]:

determining whether a right of data transmission is assigned to the external display device or to a control unit of the refrigerator;

7

converting, into serial data, a signal indicative of an operation state of the refrigerator when the data transmission right is assigned to the control unit; [while]

converting, into serial data, a key input signal when the data transmission right is assigned to the external display device;[, and]

outputting the resultant serial data; and

[inputting the output data] decoding the resultant serial data, and executing a control based on the decoded data.

12. (Amended)   A method for controlling an external display device, comprising [the steps of]:

determining whether or not there is data to be transmitted;

checking whether or not a right of data transmission is assigned; and

transmitting, if it is determined that there is data to be transmitted, [transmitting] the data when there is a data transmission right assigned;[, while]

executing a procedure for requesting the data transmission right when there is no data transmission right[;

determining whether or not there is data received; and

if it is determined that there is data received, continuously executing the current transmission mode when there is a data transmission right, while processing the received data when there is no data transmission right].

8

Please add the following claims:

--16.   The method of claim 12, further comprising:

determining whether or not there is data received;

continuously executing, if it is determined that there is data received, the

current transmission mode when there is a data transmission right; and

processing the received data when there is no data transmission right.

17.   The external display device as claimed in claim 1, wherein said

display unit includes a first microprocessor and said control unit includes a

second microprocessor.

18.   The external display device as claimed in claim 3, wherein said

display unit includes a first microprocessor and said control unit includes a

second microprocessor.

19.   A method for a first unit of a refrigerator to transmit a request to a

second unit of a refrigerator, comprising:

(a)   determining if said first unit is in a data transmission mode;

(b)   determining if there is data to be transmitted if, in step (a), it is

determined that said first unit is not in said data transmission mode;

(c)   determining if said first unit has a data transmission right if, in

step (b), it is determined that said first unit has said data to be transmitted;

and

(d)   transmitting said data to said second unit if, in step (c), it is determined that said first unit has said transmission right.

20.   The method of claim 19, wherein a format of said transmission comprises:

a header indicating a transmission beginning;

a command indicating the nature of the transmission;

a data appended to said command; and

a trailer indicating a transmission ending.

21.   The method of claim 19, further comprising:

(e)   determining if said first unit has a data transmission right if, in step (b), it is determined that said first unit has said data to be transmitted;

(f)   determining if said data transmission right should be assigned to said first unit if, in step (e), it is determined that said first unit has said data transmission right; and

(g)   transmitting said data to second unit if, in step (f), it is determined that said first unit should be assigned said transmission right.

22.   The method of claim 19, further comprising:

(h)   determining data from said first unit received data from said second unit;

(i)   determining if said first unit has a data transmission right if, in step (h), it is determined that said first unit received data from said second unit;

(j)   storing said data received from said second unit if ,in step (i), it is determined that said first unit has a data transmission right;

(k)   determining if further data is to be transmitted from said first unit to said second unit; and

(l)   continuously executing communication if, in step (k), it is determined that further data is to be transmitted from said first unit to said second unit.

23.   The method of claim 22 further comprising:

(m)   determining if said second processor is requesting data transmission right if, in step (k), it is determined that further data is not to be transmitted from said first unit to said second unit; and

(n)   relinquishing own data transmission right if, in step (m), it is determined that said second processor is requesting data transmission right.

24.   The method of claim 22, further comprising:

(o)   analyzing command received from said second unit if, in step (i), it is determined that said first unit has a data transmission right;

(p)   determining if said second unit has relinquished its data transmission right; and

11

(q)   acquiring said data transmission right if, in step (p), it is determined that said second has relinquished its data transmission right.

25.   The method of claim 24, further comprising:

(r)   determining if said command is an inquiry from said second processor whether said first unit has data available to be transmitted;

(s)   determining if said first unit has data to be transmitted if, in step (r), said command is said inquiry from said second unit about data availability from said first unit;

(t)   determining if said first unit data transmission right is required to send the requested data;

(u)   requesting data transmission right request to said second unit if, in step (t), said first unit requires said data transmission right; and

(v)   sending data to said second transmission unit after receiving said data transmission right.

26.   The method of claim 25, further comprising:

(w)   sending data to said second transmission unit if, in step (t), said first unit does not require said data transmission right.

27.   A method for a first unit of a refrigerator to receive and send from and to a second unit of a refrigerator, comprising:

(a)   determining if said first unit is in a reception mode;

(b)   determining if end of transmission signal is received by said first unit if, in step (a), it is determined that said first unit is in said reception mode;

(c)   receiving further data if, in step (b), it is determined that said end of transmission signal has not been received; and

(d)   storing said received data.

28.   The method of claim 27, further comprising:

(e)   determining if transmission is completed by said first unit if, in step (a), it is determined that said first unit is not in said reception mode; and

(f)   switching said first unit to be in reception mode if, in step (e), said transmission is completed by said first unit.

29.   The method of claim 28, further comprising:

(g)   determining if said first unit need to send further data to said second unit if, in step (e), said transmission not is completed by said first unit; and

(h)   transmitting said further data if, in step (g) it is determined that said first unit has further data to send.

30.   The method of claim 29, further comprising:

(i)   transmitting end of transmission signal to said second unit if, in step (g) it is determined that said first unit does not have further data to send; and

13

(j)   clearing transmission request signal.

31.   A control system for an appliance, comprising:

a user interface unit mounted on a door of said appliance;

a control unit mounted on a body of said appliance; and

a serial communication line connecting said user interface unit and said

control unit, said serial communication line being disposed through a hole of a

hinge of said door.

32.   The control system of claim 31, wherein said appliance is a

refrigerator.

33.   The control system of claim 31, wherein said user interface unit

comprises:

a display unit displaying information about said appliance; and

a key entry unit allowing a user to enter appliance preferences or modes.

34.   The control system of claim 33, wherein said user interface unit

further comprises a microprocessor.

35.   The control system of claim 31, wherein said control unit further

comprises a microprocessor.